



AERO / UAV ANTENNA PRODUCT OVERVIEW

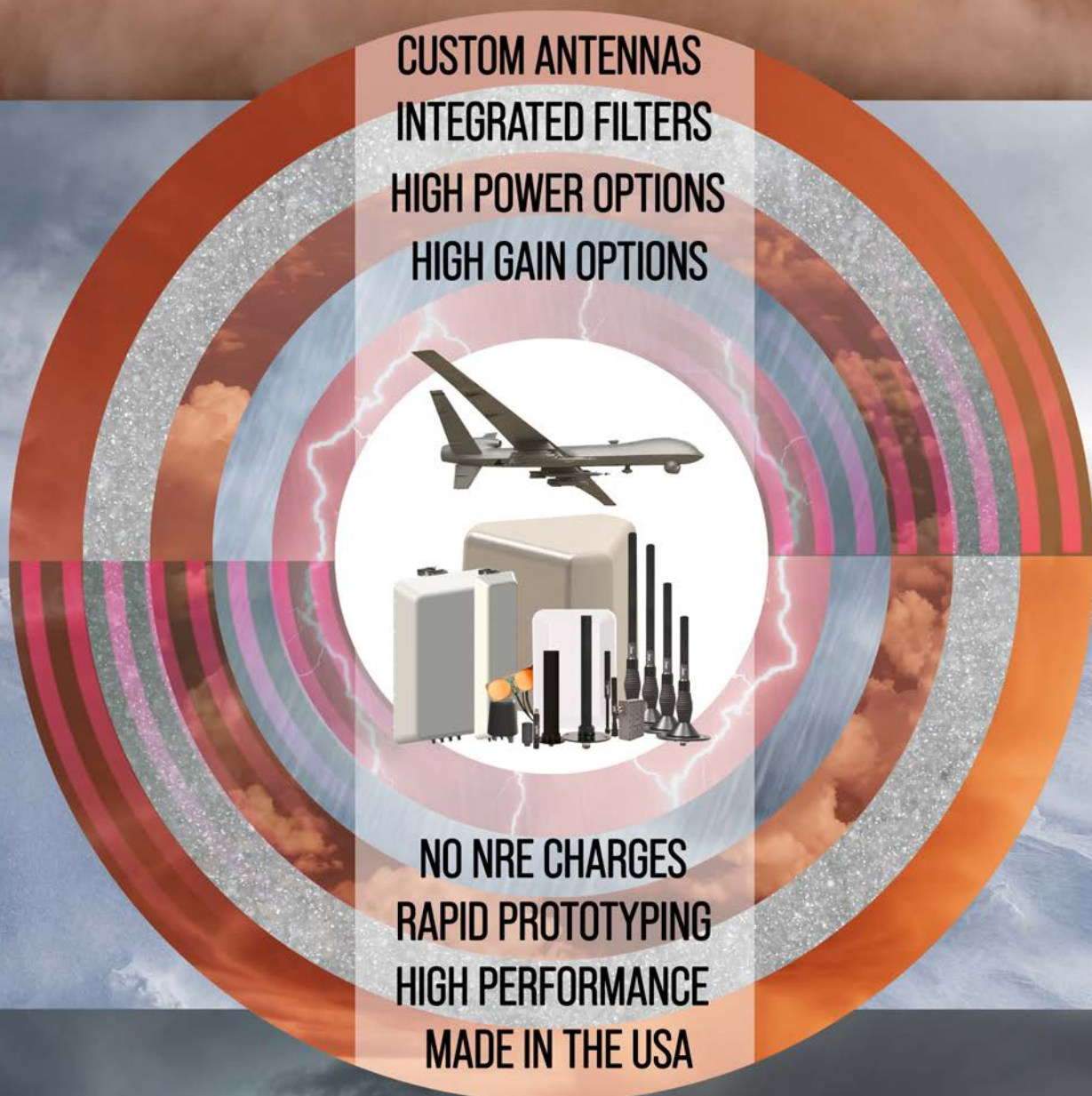


INNOVATIVE ANTENNA SOLUTIONS FOR UAV & UNMANNED SYSTEMS

Southwest Antennas is revolutionizing UAV communications with cutting-edge antenna solutions designed to enhance performance, extend range, and mitigate interference.

As the demand for reliable, high-performance connectivity grows in the unmanned systems industry, our advanced antennas provide superior signal integrity and efficiency across various operational environments.

From concealed and directional antennas to filtered solutions, we offer tailored products for UAV manufacturers, ensuring seamless communication in high-interference regions.





southwest antennas

A DRONE WITHOUT THE CORRECT ANTENNA IS AS USEFUL AS A PAPER AIRPLANE

**SO MUCH GOES INTO GETTING THE RIGHT ANTENNA
AND GETTING IT WHEN YOU NEED IT**

**ORDER YOUR
ANTENNAS
BEFORE YOU
DESIGN & BUILD**

**AND GET AN
ANTENNA
COMPATIBILITY
CONSULT AT
NO COST.**

**NO NRE CHARGES
FOR NEW DESIGNS**

**SOUTHWESTANTENNAS.COM
(858) 381-4197**



OMNI & DUAL BAND CONCEALMENT ANTENNAS



Engineered for seamless integration, our concealment antennas are compact, lightweight, and designed to be embedded within UAV structures such as winglets and fuselages. These antennas provide secure and efficient communication without compromising the aerodynamic integrity of the platform.

Key Features:

- Small form factor for discreet integration
- Optimized performance for UAV applications
- SMA, TNC and many other connectors available
- Custom tuning available for drone winglet applications
- Available in Omni & Dual Band
 - 698 MHz - 960 MHz & 1710 MHz-3000 MHz
 - 1.35-1.4 GHz
 - 2.2-2.5 & 4.4-5.9 GHz
 - And many others
- Average dBi is 1.8 - 4.0 but more options available.



**2.1 - 2.5 GHz
4.4 - 5.0 GHz
2.2 DBI MAXIMUM GAIN
S/C OMNI-DIRECTIONAL
RIGHT ANGLE SMP(F)
RF CONNECTOR.**

**PART #
1066-098**



**1.35 - 1.4 GHz
1.7 DBI MAXIMUM GAIN
L BAND OMNI-
DIRECTIONAL
RIGHT ANGLE SMA(M)
RF CONNECTOR.**

**PART #
1066-108**



**698 MHZ- 960 MHZ
1710 MHZ- 3000 MHZ
2.2 DBI MAXIMUM GAIN
4G LTE OMNI-
DIRECTIONAL
SMA(M) RF CONNECTOR.**

**PART #
1066-055**

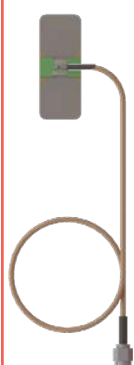


**CUSTOM TUNING AVAILABLE
FOR CONCEALMENT ANTENNAS**



**PART #
1066-067**

**JUST SEND US YOUR WINGLET
WITH A DRAWING SHOWING THE
LOCATION WHERE YOU WANT THE
ANTENNA MOUNTED & WE WILL TUNE
OUR ANTENNAS TO YOUR DRONES.**



**2.2 - 2.5 GHZ
4.4 - 5.9 GHZ
1.8 DBI MAXIMUM GAIN
S/C OMNI-DIRECTIONAL
SMA(M) RF CONNECTOR.**

**PART #
1066-034**



**1.78 - 2.3 GHZ
1.5 DBI MAXIMUM GAIN
L/S OMNI-DIRECTIONAL
U.FL RF CONNECTOR.**

**PART #
1066-003**



**1.35 - 1.4 GHZ
1.9 DBI MAXIMUM GAIN
L BAND OMNI-
DIRECTIONAL
SMC(M) RF CONNECTOR
54" LMR-100 CABLE**

**PART #
1066-081**



**2.2 - 2.5 GHZ
4.4 - 5.9 GHZ
1.8 DBI MAXIMUM GAIN
S/C OMNI-DIRECTIONAL
SMA(M) RF CONNECTOR.**

**PART #
1066-053**



**4.4 - 5.3 GHZ
6.4 DBI MAXIMUM GAIN
S/C OMNI-DIRECTIONAL
TYPE N (M) RF
CONNECTOR.**

**PART #
1066-087**

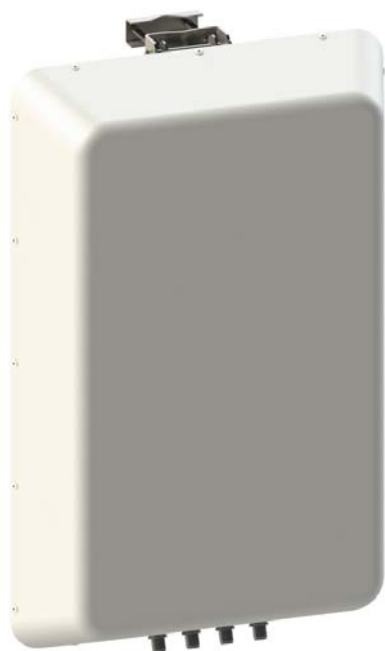


**1.78 - 2.3 GHZ
2 DBI MAXIMUM GAIN
L/S OMNI-DIRECTIONAL
SMA(F) RF CONNECTOR.**

**PART #
1085-110C**



DIRECTIONAL, PANEL, MIMO ANTENNAS



Our directional antennas offer high-gain performance for extended-range UAV communications. With single and dual-polarized models available, these antennas provide superior azimuth and elevation coverage, ensuring strong signal reception even in challenging, high interference environments.

Key Features:

- **Multi-Port Configurations:** Available with two, three, or four & twelve RF connector ports, ensuring compatibility with a wide range of radio systems and frequency bands.
- **Directional Coverage:** The sectorial radiation pattern and high gain provide focused network coverage in targeted areas, improving signal strength and communication efficiency.
- **Polarization Diversity:** Offers slant-left, slant-right, and vertical polarization options to enhance RF link performance and data throughput, even in environments with high RF interference from co-located transmitters.
- **Optional RF Filtering:** Integrated RF filters can be added to reject unwanted transmissions, optimizing radio performance.



**2.2 - 2.5 GHZ
4.4 - 5.0 GHZ
12 X 12 MIMO
S/C 360° SECTOR ARRAY
12 X TYPE N (F)
RF CONNECTORS**

**PART #
1009-076**



**4.4 - 5.0 GHZ
16 DBI MAXIMUM GAIN
C BAND DIRECTIONAL
4X4 MIMO 90° SECTOR
4 X TYPE N (F)
RF CONNECTOR**

**PART #
1009-026**



**1.7 - 2.5 GHZ
12 DBI MAXIMUM GAIN
L/C BAND DIRECTIONAL
IP-66 RATING
TNC (F) RF CONNECTOR**

**PART #
1009-019**



**WE HAVE RADOME
COLORS FOR EVERY
ENVIRONMENT**



**2.2 - 2.5 GHZ
12 DBI MAXIMUM GAIN
2X2 MIMO 120° SECTOR
SLANT L/R POLARIZED
2 X TYPE N (F)
RF CONNECTORS**

**PART #
1009-035**



**2.2 - 2.5 GHZ
15 DBI MAXIMUM GAIN
2X2 MIMO 90° SECTOR
SLANT L/R POLARIZED
2 X TYPE N (F)
RF CONNECTORS**

**PART #
1009-025**



**4.4 - 5.0 GHZ
16 DBI MAXIMUM GAIN
2X2 MIMO 90° SECTOR
SLANT L/R POLARIZED
2 X TYPE N (F)
RF CONNECTORS**

**PART #
1009-027**



**2.2 - 2.5 GHZ
15 DBI MAXIMUM GAIN
4X4 MIMO 90° SECTOR
SLANT L/R POLARIZED
4 X TYPE N (F)
RF CONNECTORS**

**PART #
1009-024**



**4.4 - 5.0 GHZ
12 DBI MAXIMUM GAIN
4X4 MIMO 120° SECTOR
SLANT L/R POLARIZED
2 X TYPE N (F)
RF CONNECTORS**

**PART #
1009-036**

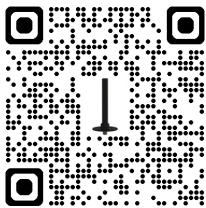


**1.7 - 1.9 GHZ
16 DBI MAXIMUM GAIN
2X2 MIMO 90° SECTOR
SLANT L/R POLARIZED
2 X TYPE N (F)
RF CONNECTORS**

**PART #
1009-032**



OMNI DIRECTIONAL ANTENNAS



For short- to mid-range UAV communications, our high-gain omni antennas deliver robust and consistent connectivity. Available in 2 through 6 dBi gain models, these antennas offer reliable signal coverage across various UAV applications.

Available in many operating frequencies covering UHF, L-, S- and C-Bands. With a variety of RF connector options, Southwest Antennas' line of integrated RF coaxial gooseneck omni antennas serves a wide range of commercial, government, military and law enforcement markets. Stand-alone RF coaxial gooseneck assemblies with custom RF connector options are available for unique applications.

Key Features:

- Compact and lightweight for UAV integration
- High-gain performance for extended coverage
- Operates mostly in the S & C Band range
- Many of our omni antennas can be altered to add a filter or IP-66 weather sealing.



2.1 - 2.5 GHZ
2.5 DBI MAXIMUM GAIN
S BAND OMNI-DIRECTIONAL
SMA(M) RF CONNECTOR

PART #
1001-048



4.4 - 5.9 GHZ
3.5 DBI MAXIMUM GAIN
C BAND ULTRA-FLEX
OMNI - DIRECTIONAL
RP-TNC(M)
RF CONNECTOR

PART #
1001-200



2.2 - 2.5 GHZ
5.2 DBI MAXIMUM GAIN
S BAND WEATHERPROOF
SEALED SPRING
OMNI - DIRECTIONAL
TNC(M) RF CONNECTOR

PART #
1085-148



2.2 - 2.5 GHZ
6 DBI MAXIMUM GAIN
S BAND OMNI-DIRECTIONAL WITH SPRING
TNC(M) RF CONNECTOR

PART #
1085-222



5.0 - 6.0 GHZ
2.3 DBI MAXIMUM GAIN
C BAND ULTRA-FLEX OMNI - DIRECTIONAL
RP-TNC(M) RF CONNECTOR

PART #
1001-086



4.4 - 5.0 GHZ
3.5 DBI MAXIMUM GAIN
C BAND GOOSENECK OMNI - DIRECTIONAL
BANDPASS FILTER RP-TNC(M) CONNECTOR

PART #
1001-187



2.1 - 2.5 GHZ
15 DBI MAXIMUM GAIN
S BAND GOOSENECK OMNI - DIRECTIONAL
TNC(M) RF CONNECTOR

PART #
1001-108



4.4 - 5.85 GHZ
3.5 DBI MAXIMUM GAIN
S BAND OMNI-DIRECTIONAL WITH FLANGE - INTERNAL LNA
TYPE N(F) CONNECTOR

PART #
1087-026



405-460 MHZ
860-935 MHZ
2.3 DBI MAXIMUM GAIN
UHF BIFILAR OMNI-DIRECTIONAL
TYPE N(M) CONNECTOR

PART #
1032-048



OUR GOAL IS TO CONNECT PEOPLE TO THEIR MISSIONS

